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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,207	04/10/2006	Yoshiyuki Matsumura	59065US008	7061
32692	7590	03/05/2009		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER KOKKINOS, NICHOLAS C	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 03/05/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/575,207

**Applicant(s)**

MATSUMURA ET AL.

**Examiner**

NICHOLAS KOKKINOS

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)  
Paper No(s)/Mail Date 17052006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

The abstract of the disclosure is objected to because reference character "7" has been used to designate both female (*page 5, line 12*) and male (*page 5, lines 19-20*) type mechanical fasteners. Correction is required. See MPEP § 608.01(b).

### *Abstract*

2. The abstract of the disclosure is objected to because it contains the legal phraseology "incorporating therein." Furthermore, the phrase "to easily recognize with eye that" contains a grammatical error and should be changed to something like "to easily recognize with *the* eye that." Appropriate correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 16-19 and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,159,584 to Eaton et al. in view of USPN 6,142,968 to Pigg et al., further in view of USPN 3,613,679 to Bijou.

7. Regarding claim 16, Eaton et al. teaches a fastening element (*coextended elastic film material 11, Fig. 2, column 6, lines 29-31*).

8. The limitation "for detachably fixing a disposable diaper" is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a **structural difference** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02. In the case of the fastening elements of Eaton et al., both the

disclosed pressure sensitive adhesive compositions (*column 11, lines 66-67 and column 12, lines 1-14*) as well as the mechanical hook structure (*column 12, lines 15-26*) can attach, thus fixing, and detach from a diaper that may be disposed.

9. Eaton et al. also teaches that the fastening element is fitted to a tab (*fastening tab material 10, Fig. 2*), and that the fastening element comprises a fastening member (*web layer 15, Fig. 2, column 6, lines 39-43*). The fastening member has an extensible member (*extensible zones 7, Fig. 2, column 6, lines 27-29*). Eaton et al. does not teach that the extensible member has a printed indicator on its face.
10. Bijou teaches an extensible member (*elastic bandage 11, Figs. 1 and 2, column 2, lines 1-8*) that has a printed (*column 1, lines 37-40*) indicator (*rectangles 10*) on its face. Per Fig. 1 and 2, the printed indicator changes with extension and contraction, and the indicator is capable of visually showing a degree of extension and contraction of the extensible member.
11. Eaton et al. teaches that for the elastic tabs on diapers, the forces of extension must be large enough secure the diaper (*engage the wearer*) but not so great as to cause injury such as bruising or red marking (*column 4, lines 30-33*). Pigg et al. teaches that the same problems that plague diaper fasteners also affect the bandage art; bandages should have enough tension that they perform their intended function (*column 1, lines 31-35*), but should not be so stretched that they injure the wearer (*column 1, lines 59-63*). Thus, the proper fitting of bandages is analogous to the proper fitting of diapers. Pigg et al. further suggests that to alleviate these problems, is it known to mark the bandages so that they indicate the degree of stretching, in ways such as those taught by Bijou (*column 1, lines 64-67 and column 2, lines 1-2*). It would have been obvious to one of ordinary skill in the art at the time of invention, upon implementing the elastic tab of Eaton et al., to look to the teachings of Pigg et al. in order to solve the problems of wearer injury, and further to look to the teachings of Bijou as suggested by Pigg et al. in order to form a tab that indicates to the user the degree to which

it has been stretched, and thus how much force it is applying to its wearer, by printing the markings of Bijou on the tab of Eaton et al.

12. Regarding claim 17, Bijou teaches that the printed indicator comprises lines, patterns, symbols, illustrations, pictures (*Figs. 1-15*) and that the printed material can also comprise different colors so as to form a color chart or color code (*column 3, lines 33-47*).

13. Furthermore, the remaining limitations of claim 17 (*photographs, numerals*) are deemed to be aesthetic design changes, because as claimed they do not impart any additional functionality over the prior art. Matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention; substituting the lines, patterns, symbols, illustrations, or pictures of Bijou with a photograph or numeral would not impart any additional functionality. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

14. Regarding claim 18, the printed indicator of Bijou is a print pattern (*see above*) and is printed at least partially to a surface of the extensible member, and is deformable in accordance with the extension and contraction of the extensible member (*Figs. 1 and 2*).

15. Regarding claim 19, applying the printed indicator of Bijou to the fastening element of Eaton et al. as above would at least partially print a color chart to the surface of the extensible member, because the printings of Bijou comprise color charts. Further, the color charts of Bijou may comprise two or more colors (*column 3, lines 40-47*). The colors change their dimension when tension is applied, as above, and do so regularly, or in a predictable fashion, in a predetermined direction (*direction of tension*).

16. Regarding claim 21, applying the printed indicator of Bijou to the surface of the extensible member of Eaton et al. would form the claimed structure, because in the embodiment of Eaton et al., the top sheet layer is porous (*slits 37, Figs. 5-7*). Application of the printed indicator to the sheet

of Eaton et al. as above colors the top sheet. Subsequent expansion of the fastening element opens up the slits (*Fig. 6*). Because the surface of the porous layer has been colored, but the interior layers remain the same, perceived color will change as the sheet is expanded and contracted.

17. Regarding claim 22, Eaton et al. teaches that the fastening member (*web layer 15, Fig. 2, column 6, lines 39-43*) and the extensible member (*extensible zones 7, Fig. 2, column 6, lines 27-29*) have a unitary structure (*Fig. 2, they are unified in one overall tab structure*).

18. Regarding claims 23 and 24, the fastening member (*web layer 15*) and the extensible member (*extensible zones 7*) are unified adjacent to each other (*Fig. 2*). Since the fastening member and extensible member are unified adjacent, or touching, one another, the structure is also such that the fastening member is unified with a part of the extensible member, again per *Fig. 2*.

19. Regarding claim 25, the fastening member of Eaton et al. can be part of a mechanical fastener (*hook fasteners, column 12, lines 15-26*), as noted above.

20. Regarding claim 26, the fastening member of Eaton et al. can be an adhesive tape, because it is a substrate with an adhesive layer on it (*column 11, lines 66-67 and column 12, lines 1-14*), as above.

21. Regarding claims 27-30, the fastening element of Eaton et al. is fitted to an ear or tab of a diaper (*Fig. 1*). Eaton et al. also teaches an article (*disposable diaper, Fig. 1*) that comprises the above described fastening element, and said article is a diaper that is capable of being disposed of. Furthermore, the diaper as depicted by Eaton et al. is of the open type (it is fastened at the sides, presumably after being fitted to the wearer) (*Fig. 1*).

22. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,159,584 to Eaton et al. in view of USPN 6,142,968 to Pigg et al., further in view of USPN 3,613,679 to Bijou as applied to claims 16-18 above, and further in view of USPN 6,075,178 to La Wilhelm et al.

23. Regarding claim 20, the structure of Eaton et al. in view of Pigg et al. in view of Bijou comprises the features of claim 19, but does not teach that the color chart is covered with a cover having a window-type opening at the substantial center of the color chart.

24. Such a structure has a distinct drawback, namely, that it is often difficult to assess when a desired degree of extension has been achieved (*Pigg et al., column 2, lines 9-11*), due to things like the different limbs and bodies of the wearers and different users applying the article (*column 2, lines 12-18*). Failure to determine the desired degree of extension leads to discomfort to the wearer, whose diaper may be improperly fitted, and who may be disturbed by the user who, unsure of diaper tension, must reapply the tabs to ensure proper fit.

25. La Wilhelm et al. teaches that for users of articles such as diapers, it is desirable to assess the condition of the diaper without disturbing its wearer (*infant, column 1, lines 27-29*), and suggests that the best way to definitely indicate to the user the condition of the diaper is to provide a plurality of translucent windows (*column 2, lines 2-9*) over a contrast layer (*column 2, lines 37-45*).

26. Although La Wilhelm et al. addresses this problem from the standpoint of wetness, the same arguments apply to the fit of the diaper; it is desirable for the user to assess both the fit and wetness of a diaper without disturbing the infant. The contrast layer of La Wilhelm et al. with regard to wetness is analogous to the printed color chart of Bijou with regard to degree of extension, as each is a visual indicator of a diaper condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention add the windowed cover sheet of La Wilhelm et al. on top of the color chart taught by Bijou. One of ordinary skill in the art would expect such a modification to be successful because the means of indication (*color change*) is the same for both wetness in La Wilhelm et al. and degree of extension in Bijou. Finally, one of ordinary skill in the art would place the window-type opening at the substantial center of the color chart as part of the above



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modification, because otherwise the indicator would be inoperable (*the user would be unable to view the color chart*).

### ***Related Art***

27. The following references are made of record but not relied upon: USPN 4,662,875 to Hirotsu et al.

### **CONCLUSION**

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS KOKKINOS whose telephone number is (571) 270-7384. The examiner can normally be reached on Monday-Thursday 9am-5pm.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NK/

Nicholas Kokkinos

Examiner, Art Unit 1794

25 February 2009

/JENNIFER MCNEIL/

Supervisory Patent Examiner, Art Unit 1794